

Typology of Historic Houses in Taft City from the Safavid Era to the Early Pahlavi Era

Mohsen Dehghani Tafti^{a*}

^a Assistant Professor of Architecture, Faculty of Architecture and Urban Planning, Iran University of Science and Technology, Tehran, Iran (Corresponding Author).

Received 16 October 2025;

Revised 22 May 2026;

Accepted 27 May 2026;

Available Online 21 June 2026

ABSTRACT

Vernacular architecture found in various cities and villages contributes significantly to the unique territorial identity of each location. Despite numerous efforts in recent years to introduce and analyze this category of buildings, our understanding of the architectural patterns specific to different regions, their theoretical foundations, and the origins of their formation remains limited. This study aims to identify the architectural patterns of historic houses in Taft City, a garden neighborhood located on the edge of the Yazd Desert. This research adopts a qualitative approach, utilizing a typological framework. To achieve the research objectives, over one hundred historic houses in Taft City were documented and analyzed typologically. The houses were categorized into four types based on their overall scheme or image conveyed by their spatial organization and physical elements: Talardār (hall-based), Shekam Darideh (cruciform), Soffehdār (iwan-based), and Kushki (pavilion-based). The results indicate that various environmental, cultural, social, and livelihood factors have collectively influenced the emergence and development of these vernacular architectural types within different contexts. Additionally, some immigrant architectural styles have made their way into Taft City. These styles were adapted and modified at two levels: “basic and preliminary” and “complex and secondary,” influenced by the local environment and the experiences of architects familiar with constructing other styles.

Keywords: Typology, Architectural Pattern, Taft City (Yazd), Historic Houses in Taft.

* E_mail: tafti@iust.ac.ir

1. INTRODUCTION

The architecture of historic houses in Iran, categorized as vernacular or indigenous architecture, contains many hidden physical and semantic values. These buildings, the most common structures in a habitat, physically express the lifeworld and lifestyle of their inhabitants (Rapoport 2009), reflecting firsthand architectural experiences and solutions. Therefore, identifying these unique experiences in each region is crucial, as it exposes us to a wealth of information with diverse characteristics. To this end, many studies have focused on indigenous houses in Iran from various perspectives, providing invaluable insights. For instance, during the 1970s, specific local contexts were examined with an emphasis on climate (e.g., Tavassoli 1981; Rahimieh and Roboubi 1974), where the analysis of houses was based on common climatic elements. Studies of indigenous architecture regarding climate using modern methods, techniques, and tools continue to this day.

In the 1980s, research on indigenous houses from a typological perspective gained popularity, aiming to create suitable models for designing new settlements. Two government organizations, Housing Foundation of Iran and the Housing and Building Research Center, conducted numerous studies on indigenous housing, primarily focusing on rural houses. The typology of rural housing in various provinces, including Khuzestan (Habibi et al. 1986), Ilam (Habibi et al. 1988), Chaharmahal and Bakhtiari (Habibi et al. 1988), Khorasan (Alalhesabi 1993), and Mazandaran (Raheb and Tarkashvand 2011), represents only a portion of the efforts made to analyze and understand indigenous houses in Iran.

In his two-volume work titled "Introduction to Iranian Residential Architecture: Introverted and Extroverted Types," Memarian (1994) critiques the materialistic and deterministic approaches in typological studies from the West. He introduces modifications to scrutinize indigenous houses in historically significant cities and villages in Iran. His books examine historical houses in Bushehr, Shiraz, Yazd, Zavareh, Gilan, Abyaneh, and Masouleh, presenting a typology based on the criteria of physical introversion and extroversion within a free framework. Research on the typology of indigenous housing has continued, utilizing different definitions and criteria to classify architectural works and propose architectural construction models (e.g., Ghasemi Sichani and Memarian 2011; Mahmoudinejad 2009; Khakpour et al. 2010; Soltanzadeh and Ghaseminia 2012; Rahimipour et al. 2020; Balali Oskoyi and Dehghan 2021; Memarian 1998).

Further studies have examined indigenous housing from cultural, social, anthropological, and spatial behavior perspectives (e.g., Bromberger 1991; Fardanesh et al. 2022; Kamalipour et al. 2012; Memarian et al. 2010; Mazumdar and Mazumdar

1997; Formolly and Saraei 2024; Askarizad 2018).

Despite these extensive studies, the wide scope and diversity of Iranian architectural works mean that research contributions remain limited, particularly regarding indigenous houses in villages and small towns. Many of these structures, often neglected and lacking recognition of their values by cultural heritage protection officials, have suffered widespread destruction, leading to the loss of these vital identity-building sources of information.

A review of existing studies reveals another issue: the inadequacy of the methods used to examine these houses. If we accept that indigenous housing is a unique phenomenon arising from specific construction experiences in each location, then identifying and extracting their physical-spatial features and the factors influencing them becomes a priority. However, in some studies, the findings are too general, making it challenging to distinguish the indigenous architecture of a particular area from that of neighboring regions with similar geographical, climatic, and cultural contexts. This limitation may stem from the lack of sensitivity in the methods applied to study architectural works.

The current study seeks to examine the historic houses in Taft City. Taft is a small, picturesque settlement with a garden-neighborhood structure, situated near the historic city of Yazd and along the route of the aqueducts that provide water to this city on the edge of the desert. Despite the preservation of its historical and natural fabric and the presence of residents who retain memories of life in its historical context and spaces, no micro or macro study has been conducted on the historic houses of Taft City. This research distinguishes itself from others by laying the groundwork for comparing the architecture of Taft City with that of neighboring settlements, taking into account their microclimatic and micro-cultural systems. One of the most significant of these settlements is the historic city of Yazd, which has a wealth of knowledge about its indigenous architecture. By comparing the architecture of these locations and identifying specific architectural solutions employed in each, we can gain invaluable insights for architectural designers.

The objective of this study is to understand the unique physical and semantic aspects of the historic houses in Taft City. It adopts a qualitative approach using a typological framework. Initially, it discusses the theoretical foundations of type and typology that will guide the analysis of the houses. The architectural structure of Taft City is then explained at different scales, considering various factors such as environmental geography, water supply, and sociocultural and livelihood issues. Finally, the study presents a typological analysis of the historic houses in Taft City based on documented data, explaining how each type served as a construction model in different contexts.

1.1. Research Questions

1. What are the different architectural types of historic houses in Taft City from the Safavid era to the early Pahlavi era?
2. What are the characteristics of the identified architectural types, and in what situations have they been used as construction models?

Theoretical foundations of type and typology

In the typology discourse, numerous definitions describe a “type” as a simple and general representation of a group of buildings (Caniggia 1963, 17). Often, the formal aspects of these definitions overshadow their semantic and intangible dimensions (Memarian and Dehghani Tafti 2018). Types serve as a platform for preserving and recalling architectural experiences, capturing the collective memory of architects and communities throughout history (Moneo 1978). A type can be seen as a representation of what is common, embodying the essence of architecture and reflecting the daily lives of residents as well as fundamental modes of living in a given place. Individual architectural works also demonstrate adaptations to the time and location of their creation, typically featuring slight variations around the same typological motif (Norberg-Schulz 1984). An architectural type utilizes physical components arranged in a specific spatial configuration. Ultimately, it is personified and realized in the form of a simple and general schema or image (Memarian 2014). This overarching image

existed in the minds of past architects, guiding them in designing basic building models suited to particular times and places.

Here, “spatial organs, structural organs, facades and arrays” serve as physical components. The arrangement and interaction of these elements create a pattern that represents a group of buildings, known as a “type.” While a type possesses intangible and deeper realities beyond its physical characteristics, these realities ultimately manifest in a tangible form. In other words, beneath the layers of physical components lies a series of semantic-physical maps, referred to as “schemas,” which stem from the lived experiences of people in that area. These schemas provide solutions that are organized within a building type and realized through various elements, such as architectural-climatic schema, privacy, daily activities, connection with nature, patriarchy, etc. (Fig. 1). Identifying these schemas within a habitat requires an understanding of the lived experiences of its inhabitants, allowing researchers to grasp the logic behind space creation and usage, as well as the emotional connections people have with architectural elements. Recognizing these feelings and experiences, alongside physical components, expands the definition of a type beyond mere material and three-dimensional aspects of a building, linking it to religious and cultural influences, customs, livelihoods, and climate (Ibid).

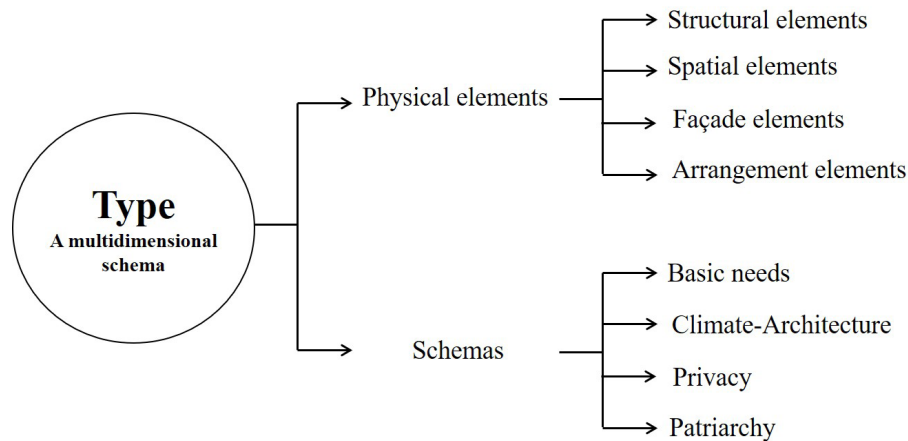


Fig. 1. Proposed Definition of Type as a Schema/Image Composed of Physical Elements and Schemas
(Memarian 2014)

3. METHOD

The present research seeks to conduct a typological study of historic houses in Taft City, based on a specific definition of type. For this purpose, more than 100 authentic historic houses in Taft City, constructed between the Safavid and early Pahlavi eras, were documented and examined over a decade. Samples were selected using a purposive sampling technique. The inclusion criteria were as follows:

identification of authentic historic houses using existing aerial photographs of Taft City taken over the years, visible physical features from the exterior of the buildings (such as portals, windcatchers, and Sabāts), recommendations from residents for sites to visit, and diversity in the samples regarding construction characteristics and neighborhood locations. Sample houses were ultimately chosen after a direct visit by a researcher familiar with the environment. The sample

size was deemed sufficient to ensure that adding more buildings would not fundamentally alter the typological outcomes.

Once the houses were identified and selected, documentation was carried out using a typological approach due to the lack of technical documents and limited information available about them. Surveying teams recorded the general characteristics of each building, including the address, registration number, age of the building, previous and current owners, the building's reputation, and its condition. They also prepared two-dimensional maps, took photographs, made films, and created three-dimensional models of the buildings. To identify and extract schemas, former residents or individuals with experience living in these houses were invited to participate in semi-structured qualitative interviews, which followed a specific framework and utilized a pre-prepared questionnaire. After completing the field study, the collected documentation data were compiled and analyzed to recreate the general structure and schema of the houses. In conclusion, the main architectural types and subtypes of houses in Taft City were identified, along with the architectural affordances and characteristics of each type.

4. BRIEF INTRODUCTION TO TAFT CITY AND ITS HOUSES

Taft City is one of the historical settlements located

near the ancient city of Yazd, along the Yazd-Shiraz Road in the central desert of Iran. In this region, various settlements have developed in accordance with the area's unique morphology, environmental conditions, and the characteristics of the local population. Taft is situated at the foot of the Shirkuh mountains, nestled between two mountain ranges, and has long been recognized as one of the primary routes for water supply to the Yazd plain (Figure 2). The city extends east to west, with its neighborhoods lined along a watercourse that runs through it. The numerous gardens, surrounding mountains, and proximity to the Shirkuh heights contribute to a more temperate climate in Taft compared to the arid climate of Yazd. Ahmad Ibn Kateb, a historian from the 9th century AH, provided a comprehensive description of Taft City. He wrote, "Know that Taft is a village located five parasangs from Yazd in the middle of the mountains. It is comprised of two neighborhoods: one attached to the foot of the mountain, with gardens connected, nearly a parasang long, called the Garmsir neighborhood, which contains gardens, orchards, the Jame Mosque, bathhouse, and watermill, where most of the inhabitants live. To the left of this neighborhood is another neighborhood called Sardsir, which is also populated. A significant river flows between these two neighborhoods, with each positioned on one side. The air in the village of Taft is extremely moderate, resulting in fewer illnesses..." (Kateb 1978, 215) (Fig. 3).

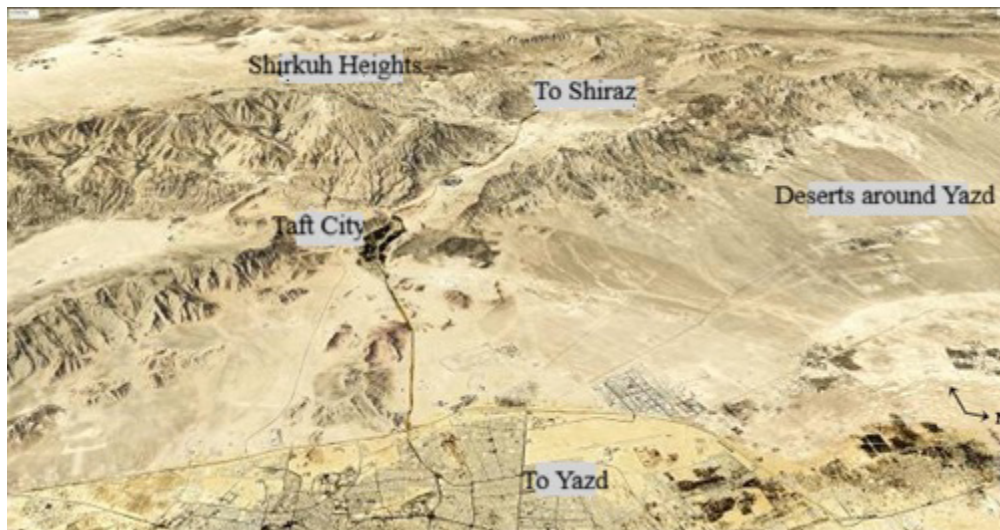


Fig. 2. Location of Taft City on the Yazd-Shiraz Road and the Route of Supplying Water from Shirkuh to the Yazd Plain

Derived from: (<https://www.map.google.com> 2026)



Fig. 3. Location of Taft City in the Valley, its East-West Extension, and the Formation of two Sardsir and Garmsir Regions on the Sides of the Watercourse

Derived from: (<https://www.map.google.com> 2026)

The physical layout of Taft City is characterized by a garden-neighborhood structure, where buildings are concentrated in one area, surrounded by gardens. While this is a physical structure, it also encompasses numerous semantic, cultural, social, and livelihood discussions essential for the community's life. The presence of gardens signifies the production-oriented and self-sufficient lifestyles of the residents, who have historically engaged in gardening, livestock raising, poultry, and sericulture. In the fourth century AH, Jeihani described Taft City as follows: "And this village (Qala-e-Majus or Qala, the old name of Taft

City) is an exceptionally pleasant village with many hamlets and abundant fruits, some of which are taken to Isfahan. The mountains are rich with trees and plants, and literature and calligraphy thrive among the people of Yazd" (Jeihani 1989, 115). Self-sufficiency and independence are further illustrated by the scale of the neighborhoods. Each neighborhood contains essential public buildings such as an Abanbar (water reservoir), watermill, mosque, school, cemetery, and public bathhouse, all nestled within the residential area, with gardens providing clear boundaries between neighborhoods (Fig. 4).

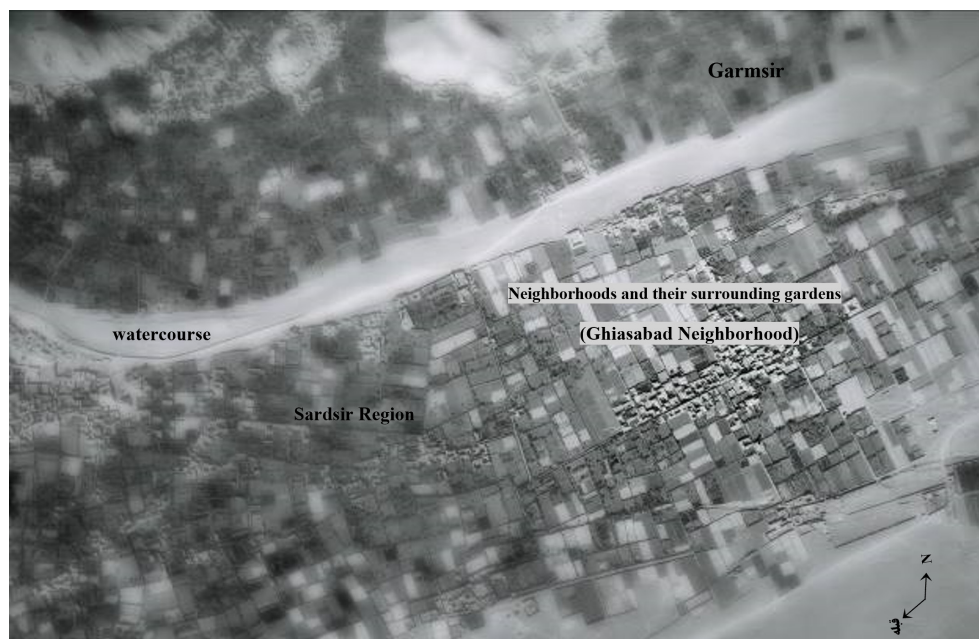


Fig. 4. Garden-Neighborhood Structure of Taft City; in this Structure, each Neighborhood with its Surrounding Gardens is located in the Sardsir or Garmsir Region.

Derived from: (Iran's National Cartographic Center (NCC), the aerial photo of Taft City (1956))

The residential fabric of Taft's neighborhoods is dense; however, it is not as compact as the historic fabric of Yazd. The architectural strategy favors relative introversion, as the climate does not permit expansive and open designs. At the same time, the beautiful views from the surrounding gardens create a strong desire to observe the outside from within. Consequently, houses have been designed with central courtyards where most activities take place.

This setup allows for the observation of external views, particularly from the upper rooms or sabāts of the houses (Fig. 5). While environmental factors play a crucial role in shaping the introverted architectural strategy of Taft's houses, a deeper examination reveals that the residents' attitudes, values, beliefs, lifestyle, and social interactions significantly influence this design approach.

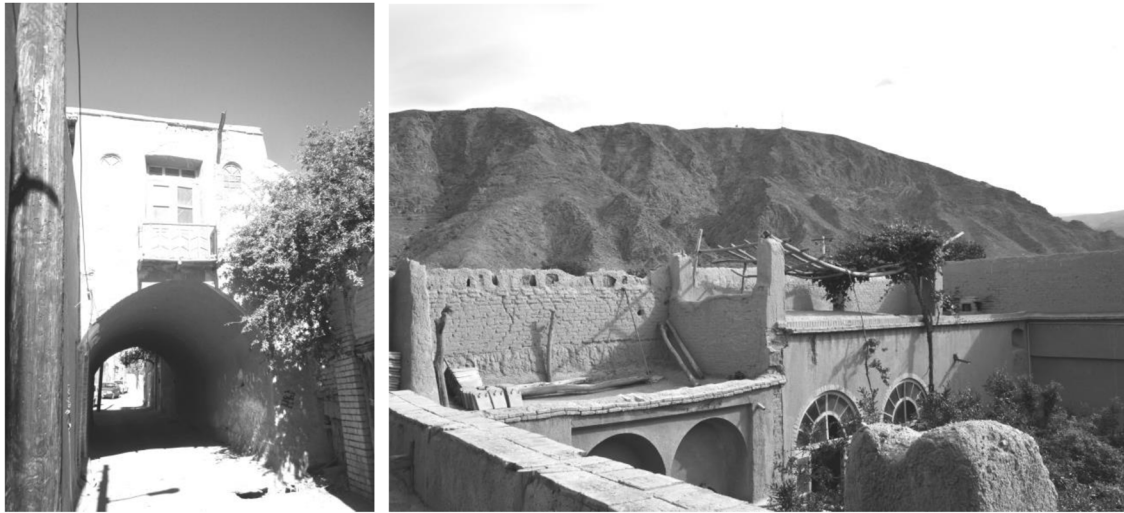


Fig. 5. The Relative Introversion Strategy used in Taft City's Houses creates a Connection between the Interior and Exterior. This Approach allows for the Observation of the Surrounding Natural Landscapes from the first Floor of Houses and the Sabāts.

A significant part of people's lives in Taft occurs in the internal spaces of their homes. This life intertwines with the earth, sky, seasons, household members, guests, gardens, livestock, and more. The activities and interactions take place in various spaces, including the hall, the Shekam Darideh room (cruciform room), the Tanabi (wind guard space), one-, two-, and three-door rooms, the upper room, the basement, the roof, the kitchen, the spring house, the pakaneh (an underground corridor to access the aqueduct water using low and irregular steps), and the stable, each with various functions. These spaces are arranged in a specific configuration, typically on one, two, or at most three sides of the courtyard, facilitating the flow of life at various times. Houses in Taft are often single-yard structures, with courtyards oriented toward the Qibla or perpendicular to it. They are built as one or two stories, usually with a basement.

The primary construction material for these houses is mud, supplemented by smaller amounts of wood and stone. The necessary mud is often sourced directly from the land on which the building is constructed.

Architectural features typically consist of brick and vaulted structures, with the ciborium covered by barrel, colombo, or kajaveh vaults. Wood is used for framing walls and roofing the verandas and upper-floor rooms. The dominant color of Taft's architecture is khaki (earthy brown), which contrasts beautifully with the lush green of the gardens. In the alleys, roofs and exterior walls are thatched, while the interior facades of the courtyard are finished with simgel (thatch mortar). The interior facades exhibit a structured order and framing in both horizontal and vertical directions. The horizontal design features a brick plinth rising from the ground, extending upwards with a simgel-covered body, and ending with a brick gable or cymatium. In the vertical design, symmetrical framing is proportional to the size and grandeur of the facade, with openings incorporated within these frames (Fig. 6). Houses in Taft emphasize simplicity in their arrangement, with complex decorations generally absent from the buildings.



Fig. 6. Panoramic Photo of the three Facades of the Zaraqian House located in the Garmsir Neighborhood of Taft
Photographer: (Nazli Jafarbeigi, May 2015)

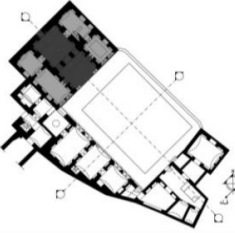
5. INDIGENOUS HOUSING CONSTRUCTION TYPES IN TAFT CITY

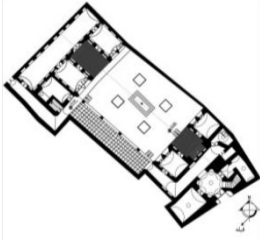
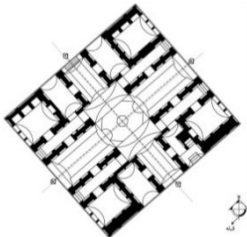
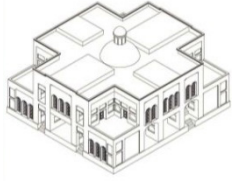
Up to this point, we have discussed some basic architectural features common to all types of construction in Taft City. This section delves into the various housing construction types found in Taft City. The variety of these constructions reflects the diversity in the context and various methods of residence. On a macro scale, the people of Taft differ in their livelihoods, economies, social statuses, land sizes, and locations—whether the land is centrally situated or on the neighborhood’s outskirts, connected to gardens, situated on sloping terrain, or on flat land. This diversity, coupled with the unique environmental conditions of each building location, has encouraged architects to adopt various strategies and solutions for creating, combining, and organizing architectural spaces.

In general, houses in Taft City can be divided into two categories: “natural or customary houses” and

“stylistic houses.” According to Issa Hojjat (2012), natural or customary houses are the most primitive types of architecture, formed not from a preconceived design or specific pattern, but in accordance with the natural characteristics of materials, elements, and components. They are designed to harmonize with the environment and satisfy the basic needs of the residents. This category, possessing many inherent values, will not be the focus of this study. In contrast, stylistic houses, which have emerged from previous experiences and advances in construction capabilities, can be classified into four main types: Talardār (hall-based), Shekam Darideh (cruciform), Soffehdār (iwan-based), and Kushki (pavilion-based) (Table 1). In the first three types, the courtyard or garden is typically positioned as an open space in the center or front of the house. In the Kushki type, the building is situated in the midst of a large garden, and the garden’s perimeter determines the boundaries of the house.

Table 1. Four Main Housing Construction Types in Taft City

Type	Sub-Type	Plan	3D Model	Photo
Indigenous Housing Construction Types in Taft City	Soffehdār			
	Shekam Darideh			

Type	Sub-Type	Plan	3D Model	Photo
Indigenous Housing Construction Types in Taft City	Talardār			
	Kushki			

5.1. Talardār (Hall-based) Type

Talardār houses are the most common and popular construction type in Taft City. They are characterized by a hall, a semi-open space with a vaulted ciborium (barrel vault), usually located at the center of the main facade of the building, directly connected to the central courtyard or garden in front of the house. Surrounding the hall, in the first layer around the courtyard, other spaces such as corridors and one-, two-, and three-door rooms are arranged symmetrically, depending on the size of the land. The ciborium of spaces often involves barrel or kalil vaults positioned sequentially

around the courtyard, typically resulting in a 3- or 5-part façade facing the courtyard (Fig. 7). The halls are frequently connected to additional spaces like the spring house and wind catcher to enhance utility. Many Talardār houses also include a basement beneath the hall, which is often used during summer afternoons.

This general scheme can be observed in numerous Talardār houses throughout the central regions of Iran. However, the most significant distinguishing factor of Talardār houses in Taft City, compared to those in other cities, lies in the spatial configuration centered around the hall and its functional role.

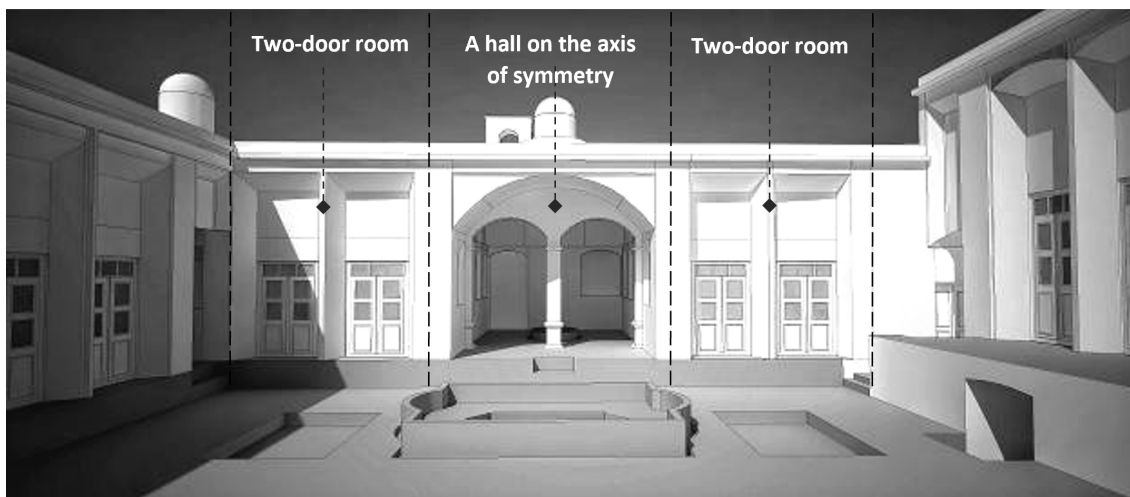


Fig. 7. Structural System and Three-Part Façade in a Talardār House. In this Type, the Hall is positioned on the Axis of Symmetry, with other Spaces connected symmetrically on either Side.

The number and location of halls in Taft's houses can vary significantly: 1- Some houses feature a single hall located on one side of the courtyard, or two halls on two different sides; 2- In some houses, two halls

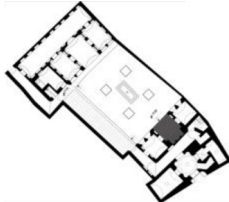
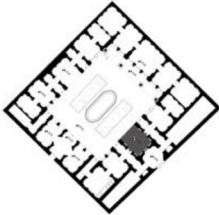
are created, one at the level of the courtyard and the other on the upper floor; and 3- In some cases, the hall may face the sun or be oriented away from it, as well as various combinations of these three arrangements.

This flexibility in hall placement allows the Talardār type to be utilized on different land sizes and in various locations. Furthermore, the diversity of land placements in Taft City has contributed to variations in architectural construction types, making the Talardār style—known for its high adaptability—a preferred choice among architects (Table 2). The construction of houses in specific locations within Taft City has always been influenced by environmental factors. These factors include the dimensions, proportions, and elongation of the land, the site’s morphology, views of the surrounding gardens, sunlight exposure, and access to water. For instance, in the Garmsir region of Taft City (the sun-facing part of the city), i.e., on the lands connected to the northern mountains and having a high slope, one- or two-story houses were arranged in a line along the course of the

aqueduct named “Shah Jo.” These homes typically have a hall that faces the sun and offers a green view of the city. The sunny areas facing the courtyard allow for the creation of spaces designed for summer use on the second level, adjacent to the hall. As a result, residents of these houses remain in the same building throughout the year, in contrast to other conventional styles in desert areas where people may move to other buildings and spaces seasonally. In other areas of Taft, where large flat lands are available, Talardār houses follow a central courtyard pattern. Depending on land conditions and the owner’s needs, these houses can have buildings on one, two, three, or, in rare cases, four sides surrounding the courtyard. The location of the hall in Talardār houses largely depends on the size and orientation of the land (Fig. 8).

Table 2. Varied Location of the Hall in the Spatial System of Talardār Houses in Taft City; The Location of the Hall is marked in Grey.

A Hall Faces away from the sun (in the Direc-Tion of the Qibla)		A Hall Faces away from the Sun (Perpendicular to the Qibla Direction)		A Hall Faces the Sun	
House and Neighborhood	Schematic Plan with the Location of the Hall	House and Neighborhood	Schematic Plan with the Location of the Hall	House and Neighborhood	Schematic Plan with the Location of the Hall
Alaei 1 Bazaar		Badami Ghiasabad		Aqa Zia Darband Mirza	
Alaei 2 Bazaar		Badgirdar Ghiasabad		Taghdir Garmsir	
Razaqian Garmsir		Mortazavi Ghiasabad		Khaneh Sabaat Sardeh	
Haji Mohammad Izadpanah Garmsir		Abdul Hossein Kheradmand Garmsir		Haji Khanum Izadpanah Garmsir	

A Hall Faces away from the sun (in the Direc-Tion of the Qibla)		A Hall Faces away from the Sun (Perpendicular to the Qibla Direction)		A Hall Faces the Sun	
House and Neighborhood	Schematic Plan with the Location of the Hall	House and Neighborhood	Schematic Plan with the Location of the Hall	House and Neighborhood	Schematic Plan with the Location of the Hall
Ostovari Sardeh		Tahmasbi Sardeh		Gharaei Garmsir	
Ali Akbar Haji Khan Sardeh		Mansouri Sardeh		A house in the Bagh Mortin Neighborhood	

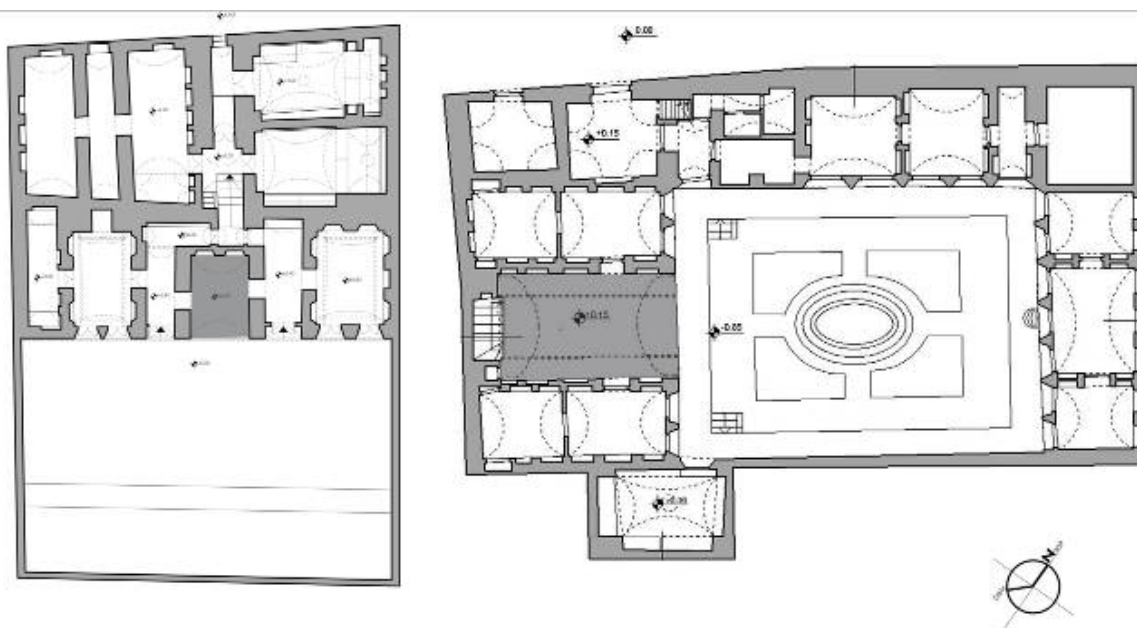


Fig. 8. A Talar-dar House with a Central Courtyard Pattern on flat Land (Right: Haji Ali Akbar Haji Khan's House in Sardeh Neighborhood) and a Talar-dar House constructed in a Linear Pattern, with a Sun-Facing Hall, on Sloped Land (Left: Mahmoud Fallah's House in Bagh Khandan Neighborhood)

The Talar-dar type of construction presents a wealth of diverse possibilities for both residents and architects in designing a house. Individuals with varying financial capabilities and needs, along with architects working on different land sites, can adopt this type as an appropriate model. Characterized by its simple yet climate-responsive spaces, Talar-dar houses effectively serve as a functional environment for the inhabitants of Taft, where living is closely intertwined with horticulture and animal husbandry.

These homes provide a variety of spaces, including rooms, courtyards, roofs, and especially halls, which

enable residents to engage in a multitude of production activities related to gardening and livestock. For instance, residents can dry leaves collected from their gardens and store them in designated rooms for winter cattle feed. Other activities include deseeding and drying pomegranates, producing pomegranate paste, drying seasonal fruits, peeling and preserving almonds, engaging in Sharbafi (the weaving of animal fur or hair), and crafting various textiles. Additionally, the art of weaving Giwah, along with sericulture and silk spinning—where Taft has shown considerable expertise¹—can be pursued year-round, all while

accommodating the daily personal and social lives of the residents.

5.2. Shekam Darideh Type (a Central Courtyard with a Shekam Darideh Room in its Center)

The central courtyard model featuring a Shekam Darideh room at its center is considered the most prestigious architectural style in Taft City, with origins tracing back to the end of the Zand era or the beginning of the Qajar era, based on existing examples. The defining characteristic of this architectural type is the cruciform space known as Shekam Darideh, which is situated along the axis of symmetry and faces the courtyard or garden. Structurally, the Shekam Darideh room features a colombo vault at its center, surrounded by Kajaveh vaults on three or four sides. Spatially, stands two stories tall and connects to the courtyard by opening the sash or several doors and windows (three-door space). In the far end of this room (opposite the sash), there may be a wind catcher in the middle or two wind catchers in the

corners. These wind catchers extend down to the basement, where the cruciform layout of the Shekam Darideh room is topped with a groin vault created by the intersection of two barrel vaults. The groin vault was used to prevent the rise of the basement ceiling and eliminate the need to fill and level that floor before constructing the ground floor (Pirnia 1994). In addition to the central space, the Shekam Darideh type includes corridors and additional rooms, arranged symmetrically around the central axis, accommodating one or two additional floors. This spatial and structural system ultimately results in a completely symmetrical appearance with three, five, seven, or nine divisions (Fig. 9). The ceilings of the side rooms on the first floor are often covered with barrel or kalil vaults, while the second floor utilizes Kajaveh vaults to help reduce lateral forces. Before constructing a house using this specific model, certain preliminary conditions need to be met, such as the owner's desire, sufficient financial resources, and the availability of a spacious, flat plot of land.

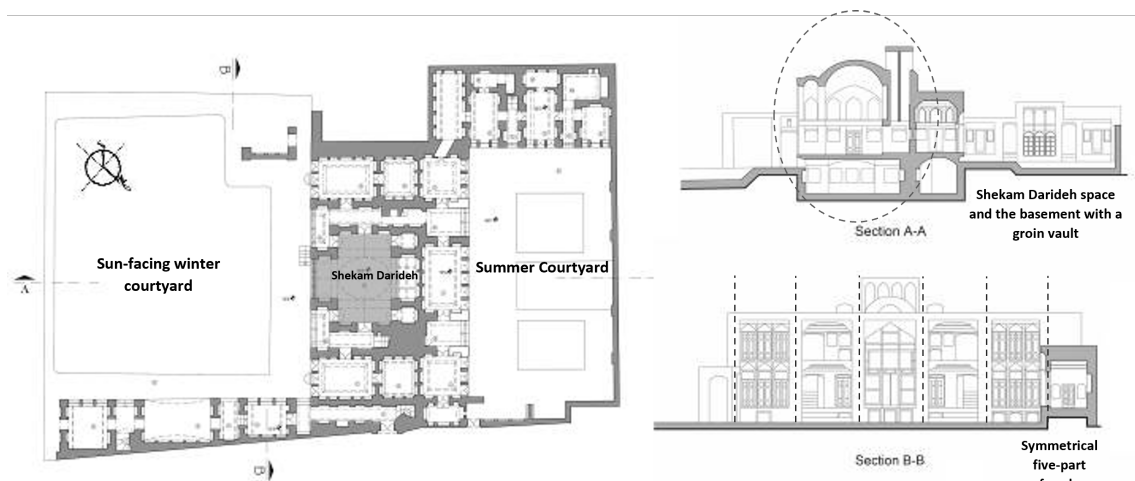


Fig. 9. An Example of the Shekam Darideh Type in Taft City. In this House, the Shekam Darideh Space Faces the Sun and is equipped with a Wind Catcher. (Sheikh al-Islami's House in Pachenar Neighborhood)

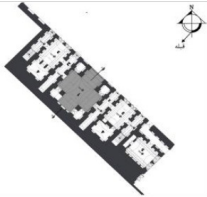
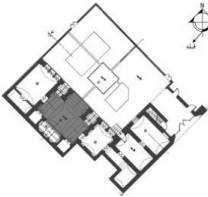
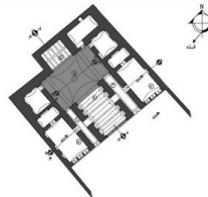
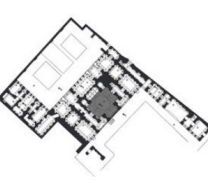
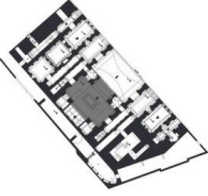
Field studies of six houses built in the Shekam Darideh style in Taft City revealed differences in the orientation and positioning of the Shekam Darideh room. In some houses, the main facade of the building, with the Shekam Darideh room at the center, faces the sun, while in others, it faces away from the sun (aligned with the Qibla direction). In homes facing away from the sun, the main facade—and consequently all primary living spaces—remain shaded, making them suitable primarily as summer residences. To facilitate year-round use, these homes required an additional facade facing the sun for winter. Conversely, in homes where the main facade faces the sun, the Shekam Darideh room benefits from direct sunlight throughout the day, allowing for winter use. However, in these cases, the presence of a wind catcher in the sunny Shekam Darideh room creates a

climatic conflict. To enhance thermal comfort during the hot months, an adjacent summer courtyard was often constructed next to the main facade (Table 3). The limited number of houses built in the Shekam Darideh style, along with the climatic mismatches associated with this model, suggests that this architectural design was likely not indigenous to the area but may have been introduced to Taft City from elsewhere at some point in history. This observation supports Rapoport's assertion that "in some places, even the climate has been questioned to elevate the status of inhabitants within that culture" (Rapoport 2009, 43). Ultimately, the architects of Taft adapted this style, achieving a more optimal configuration based on the sun-facing Talardār and Soffehdār houses, which will be discussed next. Their solution involved constructing a single facade oriented toward

the sun. This facade consisted of an elongated hall at the front of the building, with the Shekam Darideh room repositioned to the rear. This arrangement connects the elongated hall, the Shekam Darideh room, and the wind catcher in sequence, forming a

summer section of the home. The other rooms that also faced the sun could be used year-round (Fig. 10). In these houses, the Shekam Darideh space is called a Tanabi.

Table 3. Shekam Darideh-Type Houses in Taft City classified by Orientation: Facing the Sun and Facing away from the Sun

Shekam Darideh-Type Houses in Taft City and the Location of the Shekam Darideh Space					
House and Neighborhood	Schematic Plan	House and Neighborhood	Schematic Plan	House and Neighborhood	Schematic Plan
Nematollahi Darband Mirza		Iran Akhavan Shodeh Olia		Karbala'ei Hawz Bolbol	
Kazemi Sultanabad		Sheikh al-Islami Pachenar		Bagh Sadri Bagh Golabdan	

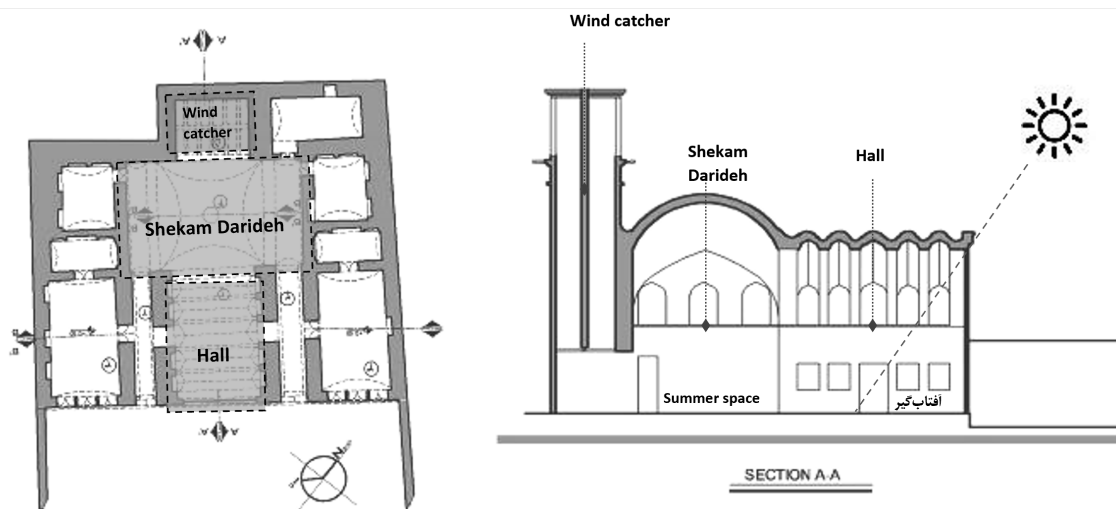


Fig. 10. Creating a Hall at the front of the Shekam Darideh Space and a Wind Catcher Area to Suit this Shekam Darideh Construction Type in Taft City (Karbala'ei's House in Hawz Bolbol Neighborhood)

The architectural format of this particular style provides specific guidelines for spatial and structural aspects of construction and expansion, with its stylistic features dominating its indigenous characteristics. This type has been used in the construction of many noble houses in Iran, particularly in Isfahan, Zavareh, and the main mansions of several palaces. Given the long-standing social and commercial ties between Taft and Isfahan—such as the export of fruit and

silk from Taft to Isfahan—this construction style is believed to have made its way to Taft from Isfahan, where it was subsequently refined.

5.3. Soffehdār type (Central Courtyard with a Soffeh (Iwan) at its Center)

The Soffehdār type (iwan-based type) is one of the oldest housing construction patterns in Taft City, featuring distinct stylistic characteristics. Field studies

reveal that only two houses built in this pattern date back to the Safavid era. This type is characterized by a relatively deep iwan and a Tanabi room, which stands two stories high in the center of the building facing the sun. Symmetrically, rooms are arranged on both the lower and upper floors, flanking the middle space to create a three-part façade. Structurally, the soffeh area is covered by a Kejaveh vault, and, in some cases, when it connects to the end wall, two squinch ribs perpendicular to the Kejaveh structure are also utilized. The ciborium of the Tanabi room is arched, employing vaults with squinch ribs. The ceilings of the rooms on the lower floor are covered by barrel vaults, while the upper floor features Kejaveh vaults (Fig. 11). Climatically, in Soffehdār

houses, seasonal movement occurs on the same front. By placing the soffeh (iwan) and the courtyard-facing rooms in direct sunlight, spaces conducive to winter were created, while the Tanabi and its basement provided cooler spaces suitable for summer. In this type of house, the soffeh served as an ideal location for sunbathing in winter, evening use in summer, and various productive activities for the residents. Overall, there are many similarities between the Soffehdār and Shekam Darideh types, leading to the conclusion that the Soffehdār type can be considered a precursor to the Shekam Darideh type. Similar houses in Isfahan closely resemble the Soffehdār houses found in Taft (Fig. 12).

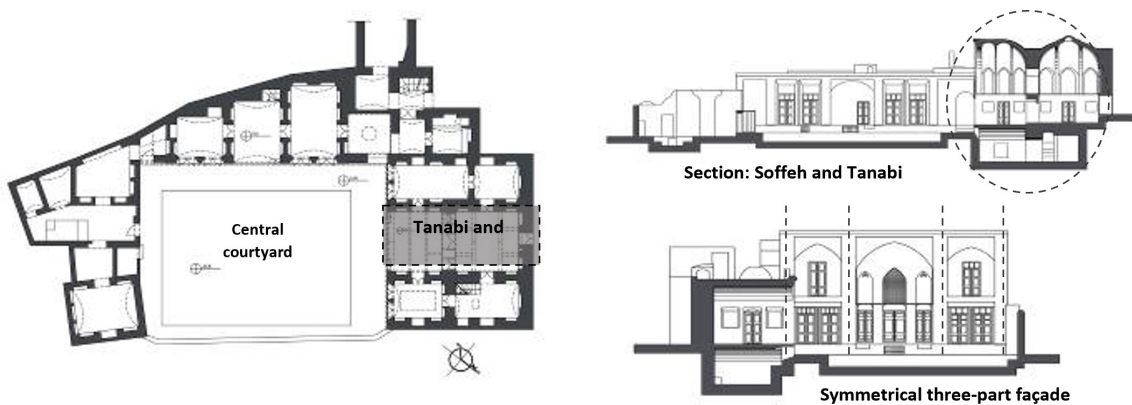


Fig. 11. An Example of the few Soffehdār Houses in Taft City that Date back to the Safavid Era (Khan Bibi Kheradmand). In this House, the Soffeh Space Faces the Sun, and the Tanabi Room is located behind it.

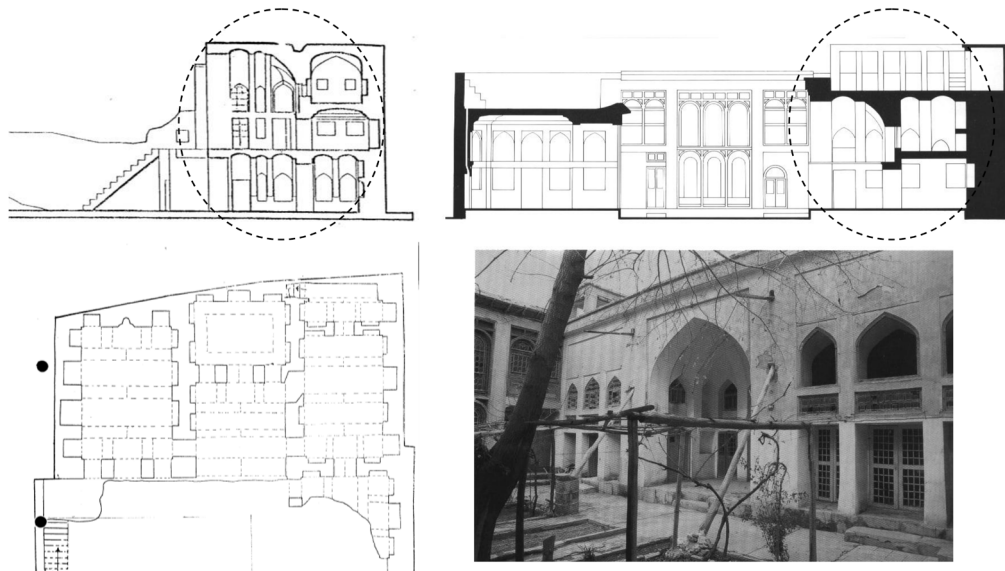


Fig. 12. The Similarity between some Houses in Isfahan and the Soffehdār-Type Houses in Taft; Zavolian House (Right) and Riahi House (Left) in Isfahan

(Tahbaz et al. 2015)

5.4. Kushki Type

In contrast to the three types mentioned above, where a courtyard or a small garden surrounds the building, the Kushki type places the structure centrally within a large garden, allowing direct interaction with the surroundings from all four sides. The central space of this Kushk typically consists of a square or rectangular-shaped pavilion, covered with a colombo vault and squinch pendentives. At ground level, a pond and channels for water circulation are included (Fig. 13). Thus, the central area of this category of houses is referred to as a spring house. In Taft City,

houses through which aqueducts passed—either on the surface or underground—often featured spaces such as payab, abanbar (water reservoir), pakaneh, and spring houses. Among these, spring houses have been significant structures, typically located at a corner of the building or connected to the halls, depending on the land's layout and the water flow. While all spring houses exhibit a structural similarity to the central space in the Kushki type, the spring house in this type plays a pivotal role in the configuration and spatial design of the building.

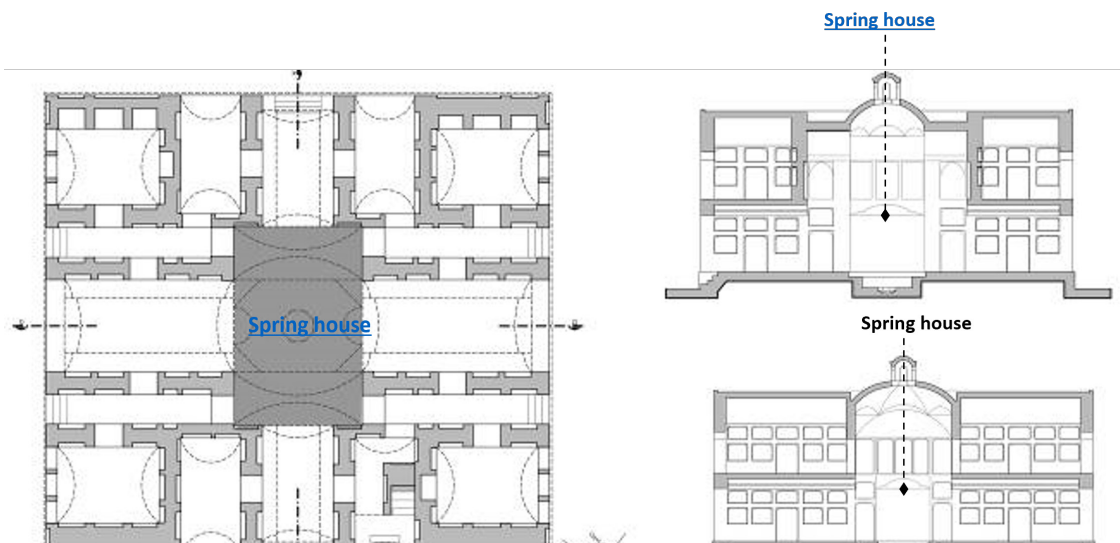


Fig. 13. An Example of a Kushki Construction Type; A Spring House in Taft City from the Qajar Era (Ali Naqi Khan's Mansion in Sultanabad Neighborhood). In this House, the Spring House is centrally located, surrounded by other Spaces.

The Kushki style features two-door rooms, three-door rooms, shahaneshin rooms, and corridors that surround the spring house, providing a bidirectional connection to both the interior (the spring house) and the exterior (the garden). In these homes, spaces located in the outer shell of the building are designed on two fronts that face the sun and two fronts that are shaded from it. The central core, or spring house, serves as a comfortable space for summer use. In the Kushki model, the main building and service spaces, such as the kitchen, stable, etc., are built around the periphery of the garden, situated away from the Kushk itself.

One notable structure that exemplifies this design in Taft City is Ali Naqi Khan's garden Kushk, which dates back to the Qajar era. This mansion was commissioned during the rule of Ali Naqi Khan, the son of Mohammad Taqi Khan Bafqi, a local khan of Yazd (Bastani Parizi 1977). Other homes built in this style were inspired by Ali Naqi Khan's Garden Kushk and were constructed on nearby lands.

6. DISCUSSION

A typological study of historic houses in Taft City, ranging from the oldest structures reminiscent of the Safavid era to later examples that have retained their historical authenticity, reveals a rich diversity in architectural styles. In this study, four main types of houses were identified: Talardār (hall-based), Shekam Darideh (cruciform), Soffehdār (iwan-based), and Kushki (pavilion-based). The Talardār type was found to be the most common and indigenous, showcasing the work of architects who utilized this design for significant changes and expansions.

The use of the Talardār type varied based on factors such as location, land shape and size, climatic orientation, and the needs of the homeowners. The Shekam Darideh and Soffehdār types, which displayed more stylistic and noble aspects, also existed in Taft City. It appears that these two types—especially Shekam Darideh—were adopted by architects influenced by Isfahan's architectural patterns, largely at the request of affluent clients. Initially, the Shekam

Darideh design faced climatic incompatibilities upon its introduction to Taft, but over time, these challenges were effectively addressed through the architects' experiences. The fourth type, the Kushki pattern, is characterized by its extroverted design, with only a few houses built in locations where aqueduct water was easily accessible. In general, each of these types (construction forms) existed as a schema in the architect's mind. When designing buildings in different locations, architects selected construction models based on an understanding of the environmental and human needs of the occupants, adapting these models according to their mental images. Of course, a settlement can experience a blend of architectural styles due to the influence of immigrant building practices from other areas. The examination of houses in Taft City indicates that these architectural types underwent transformations upon arriving in the new environment to adapt to local conditions. Some modifications were straightforward and implemented from the beginning, such as changes in materials and the use of indigenous resources, while other adjustments required more time and experience. Complex modifications, like alterations in the structure and spatial arrangement of houses, necessitated deeper insights from architects who leveraged their previous experiences and structural solutions from other styles, ultimately leading to the acceptance and integration of these immigrant types. This process contributed to the emergence of hybrid architectural forms.

The findings of this study suggest that the development of architectural types within a specific context is influenced by numerous and intricate factors, making it insufficient to attribute it to a single cause. Thus, even in regions with similar climates or cultural traits, various types of house construction can exist, as geography, climate, light, context, culture, religion, and livelihoods are interrelated and create a cohesive sense of place. Residents, drawing from their life-world and experiences in the environment, adapted to these influences in their unique cultural contexts. In this way, architecture—particularly houses—served as a mediator between humans and their broader

environment (in a general sense), facilitating the realization of specific lifestyles.

Despite the diversity in residence and construction, the architecture of Taft City maintains a sense of homogeneity. This is because a city's architecture, beyond being shaped by the types of designs conceived by architects, is also influenced by fundamental and inherent characteristics that define its architectural identity. These core features dictate design strategies, ensuring that all types reflect these traits in a harmonious manner with their respective components. It is through a shared understanding developed over time between the residents and architects that these inherent characteristics are expressed in architecture.

7. CONCLUSION

The present research examined historic houses in Taft City, focusing on the Safavid era to the Qajar period through a typological approach. In response to our research questions, we introduced four main architectural construction patterns and explained how to apply each one in different contexts. The oldest houses included in this study, of which very few remain, date back to the Safavid era, while the other examples belong to the Qajar period. The dating of the houses was established based on architectural evidence, the presence of certain structural elements, and oral sources. Consequently, reconstructing the emergence, growth, and transformation of these construction patterns faced limitations due to the lack of precise construction dates and the limited number of samples for some types.

This study serves as a foundational step toward understanding architectural types in a context where past architects designed and constructed homes using these patterns. The data and findings from this research can serve as a springboard for future extensive studies that adopt both quantitative and qualitative approaches, particularly in the fields of climate, sociocultural dynamics, and historical continuity. The outcomes of such research could provide invaluable insights for contemporary designers and architects.

ACKNOWLEDGMENTS

This article wasn't supported by any financial or spiritual sponsors.

CONFLICT OF INTEREST

The authors have no conflicts of interest to declare.

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ENDNOTE

1. In her 1960 book, "Allahs Sonne über dem Abendland: Unser Arabisches Erbe," German author Sigrid Hunke suggests that the term "taffeta," which denotes a luxurious French fabric, actually originates from the high-quality silk produced in Taft City. In this context, "taffeta" is derived from the name Taft.

REFERENCES

- Alalhesabi, Mehran. 1993. *Rural Housing Pattern: A Research on Residential Architecture in Khorasan Province*. Khorasan: Islamic Revolution Housing Foundation. [in Persian]
- Askarizad, Reza. 2018. "Influence of Socio-Cultural Factors on the Formation of Architectural Spaces (Case Study: Historical Residential Houses in Iran)". *Creative city design* 1(1): 29-36. <http://oiccpres.com/crcd/article/view/7592/4252>.
- Balali Oskoyi, Azita, and Samaneh Dehghan. 2021. "Physical typology of Qajar houses in Urmia". *Armanshahr Architecture & Urban Development* 14(37): 1-14. https://www.armanshahrjournal.com/article_147100.html. [in Persian]
- Bastani Parizi, Mohammad Ebrahim. 1977. *Khatoon Haft Ghal'eh (A collection of historical articles)*. Tehran: Amirkabir Publication. [in Persian]
- Bromberger, Christian. 1991. *Housing and architecture in the rural community of Gilan*. Translated by Alaodin Gooshegir. Tehran: Institute of Cultural Studies and Research. [in Persian]
- Caniggia, Gianfranco. 1963. *Lettura di una Città: Como*. Roma: Centro Studi di Storia Urbaniistica.
- Fardanesh, Farzin, Mohammad Hoseini, Parisa. and Heidari, Ali Akbar. 2022. "Salmasi House in Tabriz: A Cultural Analysis On the Base of Amos Rapoport's Viewpoints". *Journal of Iranian Architecture Studies* 3(5): 81-99. https://jias.kashanu.ac.ir/article_111724.html?lang=en. [in Persian]
- Formolly, Aimal, and Mohammad Hossain Saraei. 2024. "Socio-cultural transformations in modernity and household patterns: a study on local traditions housing and the impact and evolution of vernacular architecture in Yazd, Iran. City". *Territory and Architecture* 11(1): 15. <https://link.springer.com/article/10.1186/s40410-024-00236-6>.
- Ghasemi Sichani, Maryam, and Gholamhossein Memarian. 2011. "Typology of Ghajar Era House in Isfahan." *Hoviatshahr* 7(2): 78-98. <https://sanad.iau.ir/Journal/hoviatshahr/Article/795512>. [in Persian]
- Habibi, Mohsen and colleagues. 1988. *Typology of rural housing: Chaharmahal and Bakhtiari Province*. Tehran: Building & Housing Research Center. [in Persian]
- Habibi, Mohsen, et al. 1988. *Typology of rural housing: Ilam Province*. Tehran: Building & Housing Research Center. [in Persian]
- Habibi, Mohsen, et al. 1986. *Typology of rural housing: Khuzeestan Province*. Tehran: Building & Housing Research Center. [in Persian]
- Hojjat, Eisa. 2012. *Sonnat va Bedat in Iranian architectural education*. Tehran: University of Tehran. [in Persian]
- Hunke, Sigrid. 1960. *Allahs Sonne uber dem Abendland*. Translated by Morteza Rohbani. Tehran: Daftar-e Nashr Farhang Eslami. [in Persian]
- Jeihani, Abolghasem Ibn Ahmad. 1989. *Ashkal Al-alam*. Translated by Ali Ibn Abdosalem. Tehran: Beh Nashr. [in Persian]
- Kamalipour Hesam, Memarian Gholamhossein, Mohsen Faizi, and Seyed Mohammad Farid Mousavian. 2012. "Formal Classification & Spatial Configuration in Vernacular Housing: A Comparative Study on the Zoning of the Reception Area in Traditional Houses of Kerman Province". *Journal of Housing and Rural Environment* 31(138): 3-16. https://jhre.ir/browse.php?a_id=404&sid=1&slc_lang=en. [in Persian]
- Kateb, Ahmad Ibn Hossein Ibn Ali. 1978. *New History of Yazd*. Iraj Afshar. Tehran: Amirkabir. [in Persian]
- Khakpour, Mojgan, Ansari, Mojtaba and Tahernian, Ali. 2010. "The typology of houses in old urban tissues of Rasht". *Journal of Fine Arts: Architecture & Urban Planning* 2(41): 29-42. https://jfaup.ut.ac.ir/article_22266.html?lang=en. [in Persian]
- Mahmoudinejad, Hadi. 2009. *Turkmen vernacular housing: typology and physical considerations*. Tehran: Nashr Tahan. [in Persian]
- Mazumdar, Sanjoy, and Shampa Mazumdar. 1997. "Intergroup social relations and architecture: Vernacular architecture and issues of status, power, and conflict". *Environment and Behavior* 29(3): 374-421. <https://doi.org/10.1177/001391659702900304>
- Mazumdar, Sanjoy, and Shampa Mazumdar. 1997. "Religious traditions and domestic architecture: A comparative analysis of Zoroastrian and Islamic houses in Iran". *Journal of architectural and Planning Research* 14(3): 181-208. <https://www.jstor.org/stable/43030208>.
- Memarian, Gholamhossein. 1994. *Introduction to Iranian residential architecture; introverted typology*. Tehran: Iran University of Science & Technology. [in Persian]
- Memarian, Gholamhossein. 1994. *Introduction to Iranian residential architecture; extroverted typology*. Tehran: Iran University of Science & Technology. [in Persian]
- Memarian, Gholamhossein. 1998. *House typology in Iran: With special reference to Shiraz*. Ph.D Thesis. University of Manchester.

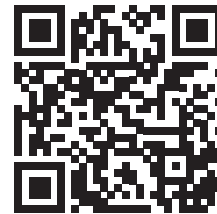
- Memarian, Gholamhossein. 2014. *The basis of architectural design*. Tehran: Naghmeh Now Andish Publication. [in Persian]
- Memarian, Gholamhossein, and Mohsen Dehghani Tafti. 2018. "Seeking to Find a Novel Concept to Type and Typology in Architecture (Case study: Vernacular Houses in Taft, Type of Tallardar)". *Journal of Housing and Rural Environment* 37(162): 21-38. https://jhre.ir/browse.php?a_id=1519&sid=1&slc_lang=en. [in Persian]
- Memarian, Gholamhossein, Seyyed Majid Hashemi Toghr Oljerdi, and Hesam Kamalipour. 2010. "The impact of religious culture on organization of houses". *Journal of Iranian Cultural Research* 3(2): 1-25. <https://sid.ir/paper/136914/en>. [in Persian]
- Moneo, Rafael. 1978. "On Typology". *Oppositions* 13: 23-45. <https://www.scribd.com/document/355925735/MO-NEO-Rafael-On-Typology-Oppositions-13-1978>.
- Norberg-Schulz, Christian. 1984. *The Concept of Dwelling: On the Way to Figurative Architecture*. New York: Rizzoli.
- Pirnia, Mohammadkarim. 1994. "Arches and vaults". *Asar* 24: 5-220. [in Persian]
- Raheb, Ghazal, and Abbas Tarkashvand. 2011. *Typology of rural housing: Mazandaran Province*. Tehran: Islamic Revolution Housing Foundation. [in Persian]
- Rahimieh, Faranghis, and Mostafa Roboubi. 1974. *Architecture of the warm and semi-humid climate of Dezfoul and Shushtar*. Tehran: University of Tehran. [in Persian]
- Rahimipour, Niloofar, Kourosh Attarian, and Mohammad Didehban. 2020. "Rural Housing Typology of Boroujerd County Based on Structural-Physical Vernacular Patterns (Case Study: Kuschki-e-sofla Village)". *Journal of Housing and Rural Environment* 39(171): 35-48. <https://jhre.ir/article-1-1904-en>. [in Persian]
- Rapoport, Amos. 2009. *Pour une anthropologie de la maison. Traslated by Khosro Afzalian*. Mashhad: Ketabkadeh Kasra. [in Persian]
- Soltanzadeh, Hossein, and Maziar Ghaseminia. 2012. "Typology study of the physical-functional structure of residential architecture in Golestan province". *Armanshahr Architecture & Urban Development* 7(4): 1-15. https://www.armanshahrjournal.com/article_32678.html?lang=en. [in Persian]
- Tahbaz, Mansoureh, Kambiz Hajighasemi, and Maryamdokht Mousavirozati. 2015. *Ganjnameh of Culture of Islamic Architectural Works of Iran (Houses of Isfahan)*. Tehran: shahid Beheshti University. [in Persian]
- Tavassoli, Mahmoud. 1974. *Urban structure and architecture in the hot arid Zone of Iran*. Tehran: Tavassoli. [in Persian]

HOW TO CITE THIS ARTICLE

Dehghani Tafti, Mohsen. 2026. Typology of Historic Houses in Taft City from the Safavid Era to the Early Pahlavi Era. *Armanshahr Architecture & Urban Development Journal* 19(54): 85-102.

DOI: 10.22034/AAUD.2026.552899.3002

URL: https://www.juep.net/article_247096.html



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